DEPARTMENT SUMMARY

OVERVIEW:

The Department of Aeronautics and Astronautics provides advanced education in Aeronautical and Astronautical Engineering to develop technical subspecialists in the field. Upper division undergraduate and graduate courses are offered in aerodynamics, structures, guidance and control, flight mechanics, propulsion and design, with applications to rotary wing and fixed wing aircraft, missiles and spacecraft.

CURRICULA SERVED:

- Aeronautical Engineering (Curriculum 610)
- Engineering/Avionics (Curriculum 611)
- NPS-TPS Cooperative Program (Curriculum 612)
- Combat Systems Science and Technology (Curriculum 533)
- Space Systems Engineering (Curriculum 591)

DEGREES GRANTED:

- Master of Science in Aeronautical Engineering
- Master of Science in Engineering Science
- Master of Science in Astronautical Engineering
- Aeronautical and Astronautical Engineer
- Doctor of Philosophy
- Doctor of Engineering in Aeronautical and Astronautical Engineering

RESEARCH THRUSTS AND FACULTY EXPERTISE:

- Aerodynamics and Aeroelasticity:
 - Distinguished Professor Max Platzer, Research Assistant Professor Kevin Jones, Research Professor Muguru Chandrasekhara, and Senior Lecturer Sheshagiri Hebbar
- Aero/Thermodynamics and Laser Technology:
 - Professor Oscar Biblarz
- Astronautics:
 - Professor Brij Agrawal and Assistant Professor Michael Spencer
- Avionics:
 - Associate Professor Russell Duren and Military Instructor CDR Mark Couch, USN
- Design:
 - Professor Conrad Newberry
- Flight Controls:
 - Associate Professor Isaac Kaminer
- Flight Mechanics:
 - Associate Professor Richard Howard
- Helicopter Engineering:
 - Professor E. Roberts Wood and Research Assistant Professor Ramesh Kolar
- Propulsion:
 - Distinguished Professor David Netzer and Research Assistant Professor Christopher Brophy
- Spacecraft Dynamics:
 - Associate Professor I. Michael Ross
- Turbopropulsion and Gasdynamics:
 - Professor Ray Shreeve and Professor Garth Hobson

RESEARCH FACILITIES:

• Aeronautical Engineering Laboratories:

- Subsonic Aerodynamics Laboratory
- o Gas Dynamics Laboratory
- o Combustion Laboratory
- o Turbo-Propulsion Laboratory
- o Computational Instruction Laboratory
- Flight Mechanics Laboratory
- o Structural Test Laboratory
- o Mechanics of Materials Laboratory
- o Dynamics and Nondestructive Evaluation Laboratory
- o Controls Laboratory
- Avionics Laboratory

Spacecraft Laboratories:

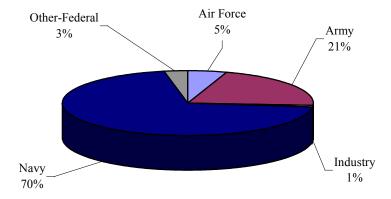
- FLTSATCOM Laboratory
- Spacecraft Test Laboratory
- o Spacecraft Attitude Dynamics Laboratory
- Spacecraft Design Laboratory

RESEARCH CENTERS:

- Navy-NASA Joint Institute of Aeronautics
- Spacecraft Research and Design Center
- Turbo-Propulsion Laboratory
- Vertical Flight Technology Center

RESEARCH PROGRAM-FY2000:

The Naval Postgraduate School's research program exceeded \$43 million in FY2000. Over 93% of the Naval Postgraduate School Research Program is externally funded. A profile of the external research sponsors for the Department of Aeronautics and Astronautics is provided below along with the size of the FY2000 externally funded program.



Size of Program: \$2012